No. 38

No 4

Jan.y 8th

Pneumonia.

J Upshur

Exam.d Mar 12th 1814

J. Upshur

Mar. 12th 1814

Pneumonia improperly divided into diffr Species

Pneumonia

The human body is liable to various forms of disease differing both in violence & duration. While some run their course in a few days, others are protracted to many months. Some are safely & easily removed by the efforts of the constitution alone, & others baffle the most skilful exertions of medical science. There are few which are more readily subdued by the prompt & early exhibition of suitable remedies, than pneumonia; but there are few which require more immediate attention; & few which, if neglected, will be productive of more serious & destructive consequences. Hence the necessity of attacking the disease in its commencement, before it is perfectly formed, & while it is in the power of medicine to remove it.

Pneumonic inflammation has been divided by some nosologists, into different species, having different appellations according to the seat of the disease. This, however, seems to be, at least, an useless multiplication of names; for very often the true seat of the inflammation cannot be

History & Symptoms

exactly ascertained. Frequently, at the same time that the lungs & pleura are inflamed, some of the abdominal viscera are also affected; when if we were guided by the feelings of the patient alone, it would induce a belief that it was seated either in the lungs or pleura only. And, indeed, if it could be determined it would be of no real utility, for it would lead to no difference in the remedies necessary for the cure of the disease.

This disease makes its appearance with greater or less severity according to circumstances. Sometimes it is attended with very violent symptoms from the beginning, the patient being affected with a severe pain in some part of the thorax immediately on the application of the exciting causes. When this is the case, the patient is, usually, unable to make a deep inspiration, & respiration is very difficult & laborious unless he is lying on his back. Sometimes, however, somewhat of an erect posture is easiest. The attack commences with a chillness which is succeeded by other symptoms of fever, such as heat, thirst, restlessness, &c. — The pulse is different according to the violence of the attack. Sometimes, owing to the violent excitement, the blood vessels are smothered (if I may be allowed the expression) & unable to act with vigour. In such a case the pulse is oppressed

and then
relieves
them, &
a favou
strong,
A trou
common
tient, &
flame
vent
concuss
able in
blood.
ing, ca
second
disease
comes
tion ta
assumes
does not
pressure
ache,
which
ten pr

and there is neither pain in the side nor cough. Venesection relieves the blood vessels of the load of blood that ~~oppr~~ oppresses them, & brings on both of those symptoms, which is considered a favourable sign. Generally, however, the pulse is full, strong, hard, frequent, & quick.

A troublesome cough, for the most part, (sometimes dry, but commonly moist even from the beginning) distresses the patient, & causes great pain by shaking & distending the inflamed parts. This often makes him hold his breath to prevent the effort of coughing, & to avoid the consequent concussion. Expectoration is, in the commencement, inconsiderable in quantity, of thin consistence, & often striated with blood. The violence of the pain, which is increased by coughing, causes a constant watchfulness. — Very often, about the second day after the attack, delirium supervenes; & unless the disease be removed by proper remedies a clammy sweat comes on & is soon succeeded by death. Or otherwise suppuration takes place accompanied with hectic fever; & the disease assumes the form of a confirmed phthisis. The disease, however, does not often run it's course so rapidly, but after the usual precursors of pyrexia, such as chills alternating with heat, headache, languor, prostration of strength &c. the symptoms, by which its character is more particularly marked, come on & often progress more slowly.

of pain
always
in the
about
place
sometim
& occase
times
& pung
but so
clavic
In ma
in vio
its pas
are com
from th
-tity. Th
of the
tom w
stead o
which
prima
power
the pa

A pain in some part of the thorax is a symptom which always attends pneumonic inflammation. It is not always in the same place, but is most commonly in the right side about the middle of the 6th or 7th rib. It sometimes takes place higher or lower, more backward or more foward. It is sometimes seated under the sternum; often in the left side, & occasionally in the back between the shoulders. It is sometimes dull with a sensation of weight, but much oftener sharp & pungent. It is generally fixed after the disease is fully formed, but sometimes it flies to the sternum, scapula, or clavicle with a lancinating sensation.

In many instances the face is swollen & becomes purple in violent fits of coughing which impede the blood in its passage through the lungs. - The head aches. The bowels are commonly constipated, but sometimes there is a looseness from the beginning. The urine is high coloured & small in quantity. The skin is dry & hot, & there is a great diminution of the secretions. The tongue is white & furred, a symptom which always attends synocha fever. Sometimes instead of being white it is tinged of a yellowish colour, which indicates the presence of bile accumulated in the primæ viæ. - The senses are, often much impaired. The power of smelling & tasting is almost entirely suspended, & the patient hears very imperfectly. Sometimes, in this, as

Terminations of Pneumonia

vs Resolution

well as other diseases of excessive excitement, the imagination is much lightened, & the patient makes use of handsome flights of fancy, such as he would not be capable of in a natural & healthy state.

Blood drawn in the disease in question, exhibits a sizy appearance & buff coloured coat. These appearances in the blood, however, form a very uncertain criterion by which to judge of the degree of inflammation, for we know that they are altered by the quickness or slowness of its flowing from the vein. When it flows from a full & free stream from a large orifice there will be more size & a greater thickness of buff than when it issues from a small orifice or runs slowly from any other cause. It was remarked by Doct.r Sydenham that, tho the blood flows ever so fast, yet if it does not stream horizontally from the open vein, but runs perpendicularly down along the skin, it is frequently of another colour, which I confess I cannot account for, and such a bleeding is also less serviceable".

Pneumonia terminates in various ways. The safest & most frequent is by resolution; &, indeed, it seldom ends favourably in any other way. When the termination is by resolution, it generally takes place in the course of the first week, if the disease is violent. Often, however, if it

entire Stomachy

Suppuration of Vomica

Pus evacuated

by

Paracentesis Thoracis

be not very violent it does not happen before the second or third week. In some instances a favourable diaphoresis has come on; the symptoms have gradually abated, & the disease has thus gone off of itself. It should be remembered, however, that this favourable event is very seldom to be expected, & that, without the use of remedies, the event will for the most part be fatal. — Resolution is accompanied with a copious expectoration of a yellowish matter which is sometimes streaked with blood. — A diarrhoa frequently comes on, & it is sometimes attended with a flow of the menses. It is often terminated by a critical hemorrhage, most frequently from the nose, & sometimes from the hemorrhoidal vessels.

This disease sometimes terminates in suppuration, a very dreadful & almost always fatal event. When this process has commenced, the patient feels a sensation of coldness in some part of the chest, & is affected with rigors. The pulse is weaker & softer; the pain & expectoration cease, & dispnoa & cough become urgent. Sweat appears about the breast, face, & upper extremities. A vomica is formed in the lungs which bursts, & filling the air cells with pus, causes immediate suffocation; or it is effused into the cavity of the thorax & produces empyema & hectic fever. In a few instances it is said that empyema has been relieved by paracentesis thoracis.

Pus effused into Trachea

This, however, tho' it may sometimes be successful, is a very serious alternative; for there is every reason to believe that, if an opening be made into the cavity of the thorax communicating with the external air, the lung on that side will collapse; & respiration & the decarbonation of the blood will, of necessity, be less perfectly performed. — It has been asserted that an opening thus made into the thorax would not produce this effect on the organs of respiration. But as the lungs are dilated only by the pressure of air rushing in to fill up the vacuum produced by the action of the diaphragm & intercostal muscles, it is evident that, such an effect would be prevented by an equal pressure on the surface of the lungs, & that they would remain passive. This opinion, at least, is taught in this university, & the entire confidence which I place in what I hear advanced within its walls, would alone induce me to adopt it without the least hesitation. Notwithstanding this effect, however, the operation should certainly be performed whenever there is a very large quantity of fluid collected in the cavity of the thorax, or it would so confine the heart & lungs, as to produce suffocation.

Sometimes the pus is effused into the trachea & is thrown out with the sputa; ulceration of the lungs takes place, & phthisis pulmonalis supervenes. When the vomica has burst into the thorax, it may be known by a fluctuation which the patient is sometimes sensible of on a sudden alteration of

Exciting Causes

constitutions & lax habits. For this reason men are oftener & more violently attacked with it than women. This, however, is not the only cause, for the nature of their occupations in life renders it necessary for them to be oftener exposed to the exciting causes. — A strong animal diet increases the tendency to this disease & renders it more violent, making more copious depletion, & stricter attention to the antiphlogistic regimen, necessary. It happens most frequently in the winter & spring, & especially in the latter season, the vernal warmth acting on the increased excitability of the system.

Amongst the direct exciting causes of pneumonia are most or all of those which excite other fevers; & perhaps, the most frequent is cold applied to a heated system; or to the lungs themselves. — Does not the state of the system, when the exciting causes are applied, have some effect in fixing the particular character of the fever? Any sudden shock on the system is liable to prove injurious. A sudden transition from heat to cold or vice versa is apt to derange the action of the system & render it irregular & morbic. If these circumstances should occur in a full, plethoric habit would not an inflammatory fever be the consequence? It has been said that this disease may be produced by all those causes which are capable of exciting the blood vessels to a

more
-ing b
to the
dimin
In in
the st
-ease m
in suc
would
disease
-tions o
of the
thorax
-bencles
that
fine
of vel
-duce
-ings
Large
are s
-bly, m
-ments
ribs, e

more vigorous action; such as violent exercise, running, jumping &c. But there seems to be something more necessary to the production of disease than the mere increase or diminution of action.

In innumerating the causes of the disease in question the state of the lungs should be considered. A previous disease might become a predisposing cause by having the lungs in such a state that trifling exciting causes, which, otherwise would not be injurious, would in this case easily induce the disease. Amongst the indirect causes have been mentioned Eruptions or habitual sweats imprudently repelled; also a suppression of the menses or hemorrhoids. — External violence done to the thorax sometimes produces pneumonic inflammation. Also tubercles formed in the lungs; & altho the physician may be aware that depletion may increase the debility of phthisis, yet he will find it necessary to have recourse to blood-letting for the purpose of relieving the inflammation. When the inflammation is produced by this cause, & is not too violent, repeated small bleedings are more proper than copious ones.

Large draughts of cold water taken when the system is overheated, are said sometimes to produce this disease; but that is, probably, much oftener the cause of gastritis. — Puncturing instruments penetrating the thorax, or the sharp ends of fractured ribs, wounding the lungs, excite inflammation in them.

Prognosis

The prognosis may be taken from the violence of the symptoms. Pneumonia is never unattended with danger; & many cases would prove fatal if left to themselves which are easily removed by the timely application of proper remedies. When the disease makes its first appearance suddenly & with violence, it is dangerous. — Symptoms indicating violent inflammation are always to be dreaded. A very severe pain, hard, full pulse, especially if there should also be a distressing difficulty of breathing, indicate a severe disease. Breathing alternately brisk & slow, attended with a dilatation of the nares, is a very bad symptom. If the pain extend to the spine & scapula, or to the abdominal cavity it shews that the inflammation is extensive, & indicates great danger. If, after the application of remedies, the symptoms should cease; if there should be a remission of pain in the thorax; if the dyspnœa should become less distressing, & the pulse softer, we may conclude that the disease is yielding to the treatment that has been adopted, & that the cure may soon be accomplished. If, however, the symptoms should continue violent or grow worse, it is to be feared that the disease will overcome the efforts of art, & run on to a fatal termination. — Difficult or suppressed expectoration is esteemed an unfavourable symptom.

In forming a judgment of the issue of the disease, we are much assisted by considering the habit of the patient.

If he
the ex
effects
weakl
attack
danger
-nant
-peile
silent
danger
-city &
shew
tion
-tion.
consist
patien
-ent
If say
certain
Although
a cour
always
issue
a prog

If he is of a sound constitution the depletion necessary for the cure of the inflammation, will be productive of no ill effects, & will not be contraindicated. If, however, he is of weakly constitution, & of debilitated habit at the time of the attack, he cannot bear the necessary evacuations, &, therefore, great danger is to be apprehended. When this disease attacks preg-nant women it is apt to produce abortion; & when puer-peral women are affected with it, it is generally fatal. – A silent delirium accompanied with sighing, indicates great danger. Delirium is less dangerous if accompanied with loqua-city & wit. A sudden cessation of pain, with evening rigors shew that suppuration has commenced. — If the opera-tion of remedies should produce a more copious expectora-tion. If the phlegm thrown up should become of thicker consistence, & more easily rejected; & if after venesection the patient should enjoy quiet tranquil sleep, there is suffici-ent reason for supposing that the case will end favourably. If symptoms of mortification should come on, the case will certainly be fatal.

Altho these symptoms are of much assistance in forming a correct prognosis, yet they are sometimes deceptive; & it is always impossible to tell with certainty what will be the issue of the case. If, therefore, we are urged to give a prognosis, it should always be guarded, &, perhaps, it would

Diagnosis

be well, as it regards the feelings of the patients friends, as well as the reputation of the physician, to make it rather more unfavourable than the circumstances of the case seem to require.

The diagnosis of this disease is, for the most part easy. There are some diseases, however, with which, by inattention, it might be confounded. Peripneumonia notha resembles it in some of its symptoms & perhaps, more than any other disease. It comes on with febrile symptoms, - is attended with cough, difficult respiration &c. in common with pneumonia vera. It generally occurs at the same seasons, & is excited, frequently, by the same causes. But the symptoms are milder than the symptoms of the disease in question. The pain is more obscure, or rather it is more a sense of weight & oppression than of pain. Expectoration is often copious through the whole course of the disease, which is not the case, always, with pneumonia vera.

A severe catarrh very much resembles a mild pneumonia & requires the same remedies to remove it. In catarrh respiration is less impeded. A full inspiration is attended with no pain, or at least if there be any, it is very slight.

"The pain in acute hepatitis is often in such a part of the side as to make it appear like that of pleurisy & often like that too, is increased on respiration." The pain in he=

Indication of Cure

-patitis generally shoots up towards the shoulder & clavicle. Pressure on the right hypochondrium increases the pain, but the patient lies easiest on the affected side, which is not the case in pneumonia. The action of the liver is deranged, & often, the bile is in an unnatural state, so as to disorder the intestinal canal. It is, also, often attended with a yellowness of the face & eyes, & a short dry cough.

Pneumonia may often be arrested in its commencement by proper attention to the premonitory symptoms; & it is of the utmost importance to apply remedies in its incipient state. Warm pediluvium will often be of evident service in this state. Exciting a copious sweat, if done by gentle means, will also be beneficial.– If there be a stitch in the side, a stimulating application to the part will frequently be of use in relieving it.

After the disease is fully formed, the first indication is to lessen the inflammation, & thereby to prevent the dangerous consequences which it would otherwise produce. The most powerful remedy for fulfilling this indication is blood letting which should be used in the first instance. No particular limits should be set to the quantity of blood taken. The first bleeding should be copious & nearly as much as the patient can bear. The orifice from which it flows should

be lar
By the
quicke
a son
the c
of the
vigoro
contin
-ful
it in
more
guine
-perve
altho
longe
-ent
-cape
disea
symp
the
or ten
shoul
difficu
contin

be large that the necessary quantity may be quickly drawn. By these means the disease is much more easily & more quickly subdued than by small & repeated bleedings from a small orifice. Indeed, small bleedings often do harm in the commencement, by relieving the bloodvessels of so much of the load that oppresses them, as to allow them to act more vigorously. Some advise that the first loss of blood should be continued ad deliquium animi. But, tho this practice may be useful in some instances, it would be very unsafe to follow it in all cases indiscriminately. For some people are much more seriously affected by syncope than others, & do not acquire such copious evacuation. In some cases syncope supervenes before a sufficient quantity of blood is taken, & altho it would not be safe to continue the evacuation any longer at that time, yet a short time afterwards the patient will be able to loose a sufficient quantity without syncope or any other inconvenience. — In any stage of the disease we should have recourse to venesection if the symptoms should require it, & the sooner it is employed the more efficacious it will be found. After the ninth or tenth day, however, tho it relieves, it seldom cures. It should be repeated as long as the pain in the thorax and difficulty of breathing continue urgent, especially if the pulse continue full & hard. The quantity of blood taken at each

time
toms b
will, fo
Sydenh
cured in
of blo
bleed
loss of
-mum
which
-flamm
the lo
reason
forty
a time
inflamm
A
drawn
not a
symp
of tha
coat
it die
of ple

time should be regulated by the violence of the symptoms & the strength of the patient. From 15 to 25 ounces will, for the most part, be sufficient for the first time. Doct.r Sydenham remarks "I have seldom known a confirmed pleurisy cured in grown persons, without the loss of about forty ounces of blood. In children, however, it is generally sufficient to bleed once or twice." This author, here, does not limit the loss of blood to forty ounces, but rather makes that the minimum of what is necessary to be taken. – There have been cases which required the loss of 60 or 100 ounces to subdue the inflammatory symptoms, but there are also many cases in which the loss of 6 or 20 ounces is amply sufficient. And, probably, the reason why Doct.r Sydenham found it necessary, always, to take forty ounces, is that he ordered only ten ounces to be taken at a time, even in the commencement. That instead of lessening the inflammation often increased it, & gave rise to the necessity for more copious depletion.

A buff-coloured coat appearing on the surface of the blood drawn indicates more blood letting. Its absence, however, should not deter us from a repetition of venesection while other symptoms are urgent & call for it, but we should make use of that remedy again & again if required; & indeed the buffy coat will often appear at the second or third bleeding, altho' it did not at first. Pregnancy seems to produce a degree of plethora, &, perhaps, on that account more blood letting will

Decoction of Cochlearia?
in Sp Scurvy

be required for the cure of pneumonic inflammation, when it attacks women in that condition.

Altho we should accommend copious bleeding as the most efficacious remedy in the cure of pneumonia when the violence of the disease requires it, yet we should not have recourse to a repetition of it unless the symptoms call for it or the strength of the patient will allow of it. It is a very debilitating remedy, & if unnecessarily or injudiciously used, it may produce such a degree of weakness that the cure, if not prevented, will, at least be very much protracted. — When the strength of the patient will not allow of repeated bleedings from the arm, & the pain & difficulty of breathing continue, topical bleeding, by leeches or cupping, will be of service.

After venesection epispastics are of very great use in relieving the pain which is always felt in some part of the chest. A large plaster of canthardes should be applied, on the first or second day, directly over the pained part. In those cases in which it seems probable that a repetition of bloodletting will not be speedily required, the blistering plaster may be applied immediately after the first bleeding; otherwise it had better be postponed until the action of the system is further reduced by venesection. As this remedy is useful by producing a derivation from the affected part, the nearer it is to that part the more efficacious it will be. —— When the bowels are

onstipat
that one
by gen
Dilating
timonia
As
tion of
culate
pose s
vide a
water
Afte
employ
used w
remain
of sle
Also e
effect
of Dove
of pota
comes
relievin
which
When

constipate the hardened faces distend the intestines, & are by that means stimulating. Costiveness should, therefore, be removed by gentle purges or clysters; but much purging is injurious. Diluting drinks to excite a diaphoresis are very proper, & the antimonial powders may be given along with them, with advantage.

As a copious expectoration generally accompanies the resolution of this disease, when obstructions take place remedies, calculated to promote this excretion, should be used. For this purpose small doses of vol: alkali, squills, tartrite of antimony in divided doses &c. will be of service. Inhaling the vapour of warm water will also have a tendency to render expectoration easier.

After sufficient venesection & other evacuations have been employed, opium is often of very great service, but it should be used with the utmost caution while any inflammatory symptoms remain. This remedy is indicated when there is restlessness & want of sleep; & it is often an useful anodyne combined with camphor. Also combined with the tartrite of antimony, besides its anodyne effect it will be salutary by exciting a diaphoresis. In the form of Dovers powder, made with white sugar instead of the sulphate of potash, it may be useful in the same way. When a cough comes on small doses of liquid laudanum are serviceable in relieving it, & they may be taken with the demulcent drinks which are commonly used for the relief of that symptom.

When the disease proceeds from an injury done to the lungs

by a b
the s
tion. Th
uits kep
piration
"As per
dangerou
a broke
the ver
whether
-ing on
should
it is
-vent
From
in whi
course,

The
is to
& all
of the
patient
much

by a broken rib, a violent inflammation is liable to come on & the means of subduing it should be vigorously put in execution. The action of the intercostal muscles should be prevented & the ribs kept motionless by a bandage round the chest, so that respiration may be performed by the action of the diaphragm alone. "Its peripneumony is always apt to succeed the accident, & is a most dangerous occurrence, every person, free from debility either having a broken rib, or supposed to have such, should always be bled in the very first instance." And this evacuation should be copious whether it is designed to prevent the inflammation from coming on, or to relieve it after it has taken place. The cough should be particularly attended to as the motion produced by it is liable to displace the ends of the fractured rib & to prevent their proper union.

From whatever cause the disease may proceed, the room in which the patient is confined, should, during its whole course, be kept cool & the patient himself, comfortable.

The disease being subdued by these remedies, a relapse is to be carefully guarded against, by avoiding exposure to cold & all other causes that are capable of producing it. On account of the great depletion which was necessary for the cure, the patient experiences a great prostration of strength, & is often much emaciated. In this state he requires tonics; & as his

spirits
violent
wine
time
but b
admit
& pub
on h

spirits are often much depressed after the removal of the violent excitement which he has lately experienced; a small portion of wine or porter has, sometimes, a very pleasant effect at the same time that it is beneficial. His diet should be nutritious, but light & easy of digestion. As soon as his strength will admit of it, exercise in the open air will be of service, & perhaps, there is no exercise more salutary than riding on horse-back.

Neuroptera 2

Termenaten 5